

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Bill Acito 06-Jun-1996 1317 <acito@asdg.ENET.dec.com>
Subject: [9482] 17A?
Message-ID: <9606061720.AA05148@us1rmc.bb.dec.com>

Chuck wrote:

17 stations within a 1000' radius is an interesting geometry problem.

The Nashua NH club has been running in the high twenties, low thirties the past few years. Always interesting to hear the first time you work them...

36Alpha? QSL?
:-)

b

. - I own my own words -
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-1 arci norcal amsat-na arrl-life

Listen for me on weekend and weekday lunchtime passes of AMRAD-OSCAR 27
(34 NA Grids, 4 EU, and 24 States Worked from FN42, QRP)

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [9452] AGCW QRP Summer Contest??
Message-ID: <7377@sugarland.ampr.org>

Anybody know what this contest is? Where are the rules and info? I found it listed in QST Contest Contest Coral, July issue.

72
Bill, K5ZTY

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Dick G0BPS <Dick@kanga.demon.co.uk>

Subject: [9449] Altoids and the Boston tea party
Message-ID: <sZuRtHAXsGrxEwBE@kanga.demon.co.uk>

In message <199606041932.NAA11114@zia.aoc.nrao.edu>, Paul Harden
<pharden@aoc.nrao.edu> writes
>

Sorry for the bandwidth, but I had to share this with you all.

At Dayton I had been joshin Paul Harden NA5N about the US, mints and
real British tea.

I made a comment that

"The colonists only dumped the tea in Boston harbour because they
thought that was the real way to make tea"

Brought forth the following

>PS - I did review my history and checked up on the true facts of the
>Boston Tea Party as you suggested. Turns out, the real reason those
>colonists dumped all the tea into the harbor is because 12 tons of
>the stuff all arrived in Altoid tins!
>

I fell about laughing, almost spilt my cup of (English) tea.....

TTFN de ...

Dick G0BPS / G0R00 <http://ukinternet.com/ham/kanga>
Kanga Products The UKs leading QRP kit supplier

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Bill Acito 06-Jun-1996 0833 <acito@asdg.ENET.dec.com>
Subject: [9460] Are you running FD QRP, or QRPp?
Message-ID: <9606061237.AA11868@us1rmc.bb.dec.com>

I'll volunteer, since I can't find last years list.

If you, or your group, is planning to run FD QRP, please send me the
following:

Call	Group or	Location	Expected Class
------	----------	----------	----------------

Personal name

QRP and/or QRPP

e.g.

W1FMR QRP-NE Princeton MA 3A Battery, QRP

I'll compile and send out.

Another idea: How 'bout a set time during the weekend for all of us to look for each other? e.g. Sunday 0500 on 7.040 +/-

b

. - I own my own words -
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-l arci norcal amsat-na arrl-life

Listen for me on weekend and weekday lunchtime passes of AMRAD-OSCAR 27
(34 NA Grids, 4 EU, and 24 States Worked from FN42, QRP)

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: jmlowman@ix.netcom.com (Jim Lowman)
Subject: [9493] Charges for mail, etc.
Message-ID: <199606062144.0AA17871@dfw-ix4.ix.netcom.com>

Bob makes a good point about keeping the discussion to QRP. Ordinarily off-topic posts don't bother me but, in consideration for those of you who may be paying to receive e-mail, the point is well taken.

Along those lines, if this is the case for you, and unless you're "urban-challenged," I would suggest getting on WWW and looking for TheList. That's what it's called and, if you enter your area code and the first three digits of the phone number you use to get on the 'net, you will (hopefully!) get a wealth of provider names that are a local, or near-local call.

I realize that not everyone is fortunate enough to have the wealth of Internet service providers (ISPs) that we have here in SoCal. This

account with Netcom costs me \$19.95 a month, and has 24/7 availability. There is never a charge for mail, WWW, news or connect time. I understand that there are some ISPs locally that charge \$12-15/month. That's the power of competition!

We are fortunate to have such a high S/N on this list, and without moderation, to boot. I read the newsgroup rec.radio.amateur.misc daily, and there's a lot of junk on there to wade through.

72 de Jim - KF6CR
QRP-L #248
FISTS #2122

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9457] deltas on other bands (long, erase, etc.)
Message-ID: <Pine.SOL.3.91.960606080058.14882D-100000@utkux4.utcc.utk.edu>

The 40-meter delta loop on other bands

We have been looking at 40-meter delta loop models. The results can be scaled with caution for other bands. However, I have been asked whether the delta loop can be used effectively on other bands. It seems plausible, but let's see what is really likely to happen.

I modeled three antennas: BOT (horizontal wire at bottom and bottom fed in the center of that wire); APX (horizontal wire at top, with feed at the apex at the bottom); and D25 (horizontal wire at bottom, fed 25% up on sloping side). I ran these #12 copper wire 1050/f (MHz) long antennas about 10' above over S-N medium ground at their lowest points to simulate what seems to be the average ham installation, and I ran models at 3.55, 7.15, 10.1, and 14.15 MHz. Here is what the models returned:

BOT: Freq (MHz)	Gain(dBi)	T0 angle (deg)	Z (R+/-jX-Ohms)
3.55	2.16	90	8145 - j20310
7.15	3.80	64	105 + j32
10.10	4.94	36	1262 + j3831
14.15	5.48	88	368 + j83

APX: Freq (MHz)	Gain(dBi)	T0 angle (deg)	Z (R+/-jX-Ohms)
3.55	3.83	90	11450 - j29848
7.15	5.73	42	136 + j1.6
10.10	6.74	30	2638 + j1314
14.15	6.49	90	224 + j153

D25: Freq (MHz)	Gain(dBi)	T0 angle (deg)	Z (R+/-jX-Ohms)
3.55	-0.41	22	21604 - j35919
7.15	1.39	15	110 + j15
10.10	3.79	51	2727 + j2534
14.15	6.84	32	228 + j93

Because the 1 WL delta loop on 40 is a half WL closed loop on 80 meters, its feedpoint is very high, with high reactance--a tough match with even the best ATU. It would take some significant wire juggling to find the precise point where the reactance changes to inductive and passes through zero. Even with a good match, the radiation goes mostly straight up or nearly so for all but the D25.

Likewise, but to a lesser degree, matching on 30 meters will not be easy for some networks. On this band, the D25 loses its low angle of radiation and receives well at all angles from about 10 degrees to 70 degrees.

On 20, the 40-meter delta loop is a 2 WL loop and has a tame input impedance. However, for the BOT and APX models, the angle of max radiation is straight up. This radiation angle is largely due to the fact that the antenna is functioning like a beam, with the earth as an extra reflector. The D25 model is likely to be outdone by a dipole at 35' (7+ dBi gain, 24-25 degree T0 angle).

In looking at these results, be sure to round all numbers into ballpark figures. With a low base to these antennas, the surrounding world is going to significantly affect them, and slight changes in the model (and hence, slight variations from the model in the version you build) can make large changes in the numbers, especially the feedpoint impedance values. But the difference between "reasonable" and "very high" should persist in reality.

These results do not mean that the upright delta cannot be used at other frequencies, and it may be better than available alternatives for a given home situation. However, best use seems to be as a single-band antenna. If you do use the antenna on other bands, think about adding antennas someday for each of those bands.

Horizontal version of the deltas had high radiation angles on 40. These would lower on 20, but still remain high compared to the 15-degree figure for D25. Hence, it is also likely (although I have not modeled them) that tilted versions would also exhibit high radiation angles on most other bands.

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: jgann@mindspring.com (Alvin G. Gann)
Subject: [9491] Dummy loads
Message-ID: <199606062120.RAA12868@borg.mindspring.com>

Recently Stan, VE7SKT, posted a message about a Radio Shack 50 ohm resistor. Today I was in my local friendly Radio Shack and bought a card of two 100 ohm, 10 w. wire wound resistors, RS 271-135. Using my DVM, I measured them for resistance. One is 100.5 ohms, the other 101.7 ohms. The paralleled value is 50.5, calculated and measured. Then I measured the inductance of each. In the same order they are 40.1 uhy and 41.4 uhy. The paralleled value measured 16.3 uhy. The calculated value would be 20.4 uhy, but I put them close together and measured at the half way point on each lead using a Sencor Z-meter digital LC meter. I don't remember what frequency that puppy uses but I seem to remember it is high AF, several 10's of KHz. Interestingly, I got no difference from either relative orientation, saying that there is no mutual inductance.

As to using this as a dummy load, the measured 16.3 uhy gives an inductive reactance of 721 ohms at 7.04 and 1036 ohms at 10.115. I haven't assembled it to check if the measured VSWR is in agreement with those calculations or not. I'm presenting the raw data (not statistically significant because of the sample size of 2) and will allow you to judge for yourselves whether this would make a useful dummy load. It would certainly be big enough to check any QRP rig in a brick on the key test.

72 --Jerry W1UI

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Raymond.Anderson@Eng.Sun.COM (Ray Anderson)
Subject: [9492] Empirical HF Receiver Article (long)
Message-ID: <9606062102.AA19191@radium.Eng.Sun.COM>

QRP'ers:

The following article was posted to the rec.radio.amateur.homebrew newsgroup today. It looks as if it may be of general interest to the homebrewers amongst us. Realizing a lot of the qrp-1 subscribers may not also have usenet access I decided to post it to the list.

My apologies to those who pay for their e-mail by the bit and byte if the length of the article bothers you. If you disagree with my posting of the article to the list, feel free to comment directly to me via e-mail, but please don't clutter the list with those comments.

72's,

-Ray Anderson WB6TPU
Tech. Editor for ARCI QRP Quarterly
raymonda@radium.eng.sun.com

Copied from rec.radio.amateur.homebrew:

>From ddiamond@TRL.OZ.AU (Drew Diamond)
Newsgroups: rec.radio.amateur.homebrew
Subject: Empirical HF Receiver (long)
From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "Rafael Garcia (EA4RJ)" <tie@bitmailer.net>
Subject: [9468] Excessive drift on Ex II 40m and RF power amp blown
Message-ID: <Pine.LNX.3.91.960606152015.749B-100000@ea4rj.ampr.org>

Hi all

The title says almost all, :)

There are two problems with this rig that my friend Angel just finish to build. First, it was the sudden blown of the RF amp transistor, a 4013, after a few QSOs the day before to start again a new session. He said that didn't do anything to damage the transistor.

My explanation would be a high VSWR when he tried to tune the antenna to the transceiver, for periods above a few seconds. The transistor joints were all open; zener diode protection apparently protected itself, ;)

I did substitute the 4013 for the first transistor that I found in my junk box: a 2N4427. Not sure if it will be a valid substitute, but now it is working, putting a maximum 3 watts under a dummy load.

I must tell you that before the original transistor was blown, the power output was strangely high, 6.5 watts. I did not see any comments about high power on the reviews that I read it (even my Ex II 30m is down 3 watts).

Perhaps, another explanation would be a high spurious content on the final bandpass filter? This would explain why there was so much power output (I have not a spectrum analyzer that will confirm this).

Well, now is working nicely, and no plan to put the original transistor. Anyway, it is not possible to find a 4013 here.

The second problem and still unsolved is the excessive VFO drift, above 1 kHz first hour. I didn't see anyone has complaint about this on qrp-l yet. The reviews I read it, all say is under 200 Hz.

The frequency is moving down continuously, and it is very visible in a normal QSO, tending to correct the main tuning all the time. My first suspicion is C52 at the VFO, but this cap is COG, and I'm in doubt this cap is out of features.

Can anyone suggest me another point to test?

Thanks in advance.

PS. According to John Shuster's post, looking for the new OHR-100, 40m version!! Will it have an s-meter?

Rafael,
Madrid (Spain)

EA4RJ TMPS 1996 Qs=009 States=00 Confirmed=00 DX=06
DL G GW PA T9 3Z

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [9485] F.D. Antennas
Message-ID: <199606061825.0AA57802@nss2.CC.Lehigh.EDU>

In the past we have tried running 80 M and 40 M inverted V antennas on the same tower and at right angles to each other. Each ant fed a separate rig.
The experiment was a flop as we couldn't make any contacts on 80 until we separated the two antennas and put the 80 m on a separate pole .
72 to all and have a good F.D.
JIM VE3DDY.

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Phillip Cuchetti <ab082@traverse.lib.mi.us>
Subject: [9495] famous qrp rig for sale
Message-ID: <Pine.ULT.3.90.960606181710.14004A-100000@traverse.lib.mi.us>

I have the legendary 8p6eu 20 mtr xciever built and operated by Doug Demaw w1fb for sale.I would like it to have a good home where it'll get the use and respect it deserves.
I have all the docs for it .It includes a built in keyer,cw

filter,vxo,runs on 12 volts and was featured in many articles.
It really is a classic rig and in perfect shape.I bought it from W1FB
himself.Asking 150 dollars for it or best offer.
It's a great addition to any collection.Runs 8 watts.....
I'll throw in one of my famous green lake paddles that have been featured
in many Ham magazines.I build them myself.
call me at 616-275-6251 after 4pm edt or send a note to
ab082@traverse.lib.mi.us
72.....Hurry!...Phil KD8UX

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Hank Kohl <k8dd@sun.tir.com>
Subject: [9450] Field Day in Utah
Message-ID: <9606061039.AA08948@tir.com>

Stan AC8W is going to be in, or near, Salt Lake City, Utah at a
Kiwanis Convention over Field Day weekend. He's looking for a
QRP Field Day site to visit. If anyone can help Stan get a "radio fix"
that weekend, let me know and I will pass it on to Stan.

As soon as we get a modem in Stan's computer, he'll be on the list.

73 es thanks
Hank K8DD

*/	Hank Kohl	K8DD	k8dd@tir.com
*/	MI-QRP	QRP-ARCI	G-QRP NorCal
*/	ARRL/LM	QCWA/LM	QCAO/LM

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [9467] FS: MFJ 20m QRP xcvr w/keyer & CW filter
Message-ID: <Pine.3.89.9606060837.A5025-0100000@w3eax.umd.edu>

Excellent condition, with built-in speaker and optional Curtis keyer and
CW filter. Covers 14.000 - 14.070 MHz and is single superhet with 5
watts output.

Radio sells for \$169, keyer for \$40 and filter for \$30. Asking
\$165/offer for the radio, which includes original box & manual.

* Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 80-10/6/2/440 *
*** VHF @ <25w, HF @ <5w *** Save a cake, pound BRASS instead ***
* 138 cfd with dipoles * QRP-L #147 QRP ARCI #9054 DXCC/WAS/WAC *
* 301-549-1022 h / 301-982-1015 w * 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: w3fpr@nando.net (D B Wilhelm)
Subject: [9496] GRC 174, 1.5v filaments (Tube to SS conversion)
Message-ID: <199606062238.SAA02004@parsifal.nando.net>

Nils & Gang,

I have converted some old boat-anchors from tubes to Solid State Stuff.
Some successful, others not quite so good but workable.

My guidelines are to use mostly dual gate MOSFETS since the high input impedance more closely matches the old tube designs. The circuits shown in the ARRL handbooks using MOSFETS are a good starting point for planning the stage to be converted.

I usually start at the RF end of a receiver when doing a conversion and check each stage as I complete it. One thing that I have found is that the MOSFETS often have much more gain than the tube stage, and this can lead to trouble in the completed receiver. That's one reason I check it as I go. Too much gain leads to unwanted oscillations and regenerative IF stages very quickly.

The AGC circuits to control the MOSFETS is quite different than for the tubes, so plan to add circuits for AGC - again the ARRL handbook has some design starting points.

I usually convert the oscillators using dual gate MOSFETS too, usually by connecting both gates together. Again, I find the impedances match better than trying to do a conversion with transistors.

Once you get to the audio stages, abandon the MOSFETS and go with just about any type amplifier you desire.

If I were starting with a non-functional receiver, I would likely start at the detector first and work my way toward the RF end. Feeding the detector output to a workbench audio amp for test purposes, and again testing each stage as I proceed.

So far I have been successful with several old command receivers, a BC-221 frequency meter, and several other receivers that I don't have anymore.

I usually leave the tube sockets in place, and use the pins as terminal strips. Don't forget to disconnect the old B+ line at before turning the power on. Those solid state devices will protect the fuse every time!

Good luck with it.

72 de W3FPR, Don

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [9463] Help - Butternut HF6V
Message-ID: <31B6DB06.6FC5@bnl.gov>

Hi All,

I just picked up a Butternut HF6V - Just what I've wanted for a long time. (NOT NEW - That's why I need help).

The matching line is missing! Can someone tell me how long to make the 75 ohm coax matching line. I temporarily made one the length of the vertical. I can easily cut it back to the proper length.

Also, I'm planning on mounting it on my chimney. Any suggestions? or warnings? Thanks gang.

72
Nick

KF2PH TMPS 1996 Qs=031 States=12 Confirmed=06 DX=04

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Nicholas J. Franco <>> BROOKHAVEN NATIONAL LABORATORY
Sr. Systems Specialist RHIC Project - Building 1005 - Room 201
Tel: (516) 344-5467 Fax: (516) 344-3674 UPTON, N.Y. 11973-5000
Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "j.w. thornton" <dub@oklahoma.net>
Subject: [9472] Loop Ants:
Message-ID: <199606061506.KAA25362@dns.okc>

Hi List: Been followin the saga of the loop ant with interest. One of the

more common ants found on (and highly touted), would be the horizontal loop, one wavelength @80 meters, fed with tuned feeders for all bands 80 & above. My own is @35' height, 3 sided, corner fed with homebrew 12ga ladder line to a tuner.

Essentially, what I have retained from reading many opinions from many authors, is that the ant radiates primarily as a "cloud warmer" at the one wavelength design freq, while the gain increases and angle of radiation decreases as we move up to the higher bands.

Be interesting to see this one modeled.

"72"

J. W. (Dub) Thornton WA5YFY
Minco, Ok.

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "Floyd Soo, KF8AT" <hires@rust.net>
Subject: [9484] MEGA QRP Field Day!
Message-ID: <31B74401.4D15@rust.net>

The Utica Shelby Emergency Communications Association (USECA) will be hosting a QRP Field Day of epic proportions! In the past, we have run 17A and for the last 2 years running, we have placed 8th OVERALL in Field Day Standings! We hope to do it again for the 3rd year in a row by operating QRP!

The past 2 years we have been operating under the callsign of "WY8M"
We have not determined whose callsign we are going to use this year, but when I get that information, I will be sure to post it here!

I wish to thank the folks that have been in contact with me with your ideas and encouragement. Many of the QRP-L gang have been very helpful!

I also want to make sure that everybody knows that the Red Carpet will be rolled out for any and all of you folks out there in QRPland! USECA has always had an open door policy for all events! Please stop by and sign in. The coffee pot will be on and you are all invited to operate, log, mingle, etc. In the past, we provided a couple of good sized pigs being roasted on Saturday, but we don't do that anymore, we just supply steaks that you can grill yourself now! Oh, well, too bad all of you can't come by and participate! Sure would be great to have all of you here!

72,
Floyd Soo, KF8AT

QRP-L #392
President, USECA

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [9497] Need 2 toroids
Message-ID: <9606062317.AA14038@flowserver.stem.com>

Greetings! Anyone in the SF bay area have two t36-7 torroids they can part with? Due to one business trip followed by the other, I won't have time to mail order them and they are crucial to my cascade effort.

Lemme Know....

dave

.

David J Adams N9UXU QRP-L #83
dave@flowserver.stem.com NorCal QRP #1442
(415) 813-5028 Flow Cytometry Specialist

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: KFGlynn@aol.com
Subject: [9478] Need good source for ladder-line and ant parts
Message-ID: <960606124001_550627660@emout19.mail.aol.com>

Hi gang,

Can anyone recommend a vendor selling ladder-line (300 and 450 ohm) as well as ladder-loc type center insulators for 450 ohm ladder-line? Will be making a new 80M Delta Loop for FD and another for portable oper. Will be working a Special Event Sta on Sat prior to FD and will be testing them then.

I appreciate the info.

73 Kevin KB2TEO

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Scott Hoag <kf2zw@frontiernet.net>
Subject: [9501] need help!
Message-ID: <31B693C9.6082@frontiernet.net>

I have changed my internet carrier from AOL to Frontiernet and can't subscribe to the QRP-l. My subscribe post to [listen@lehigh.edu] comes back as address unknown. Any help please?

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Bob Hightower <ki7mn@dancris.com>
Subject: [9470] NRA, QRP Things & Stuff, etc
Message-ID: <199606061436.HAA23826@dancris.com>

Could we keep this list to real qrp stuff? Some of us on the list pay by the message, etc, and really don't need to stray too far afield.

(Yes, I belong to the NRA, life member for 30 years, but not on this list.)
73,
Bob KI7MN NorCal 1221 ARCI 8918 Qrp-l 271 CQC 274 ARRL (Not in any order of importance!)

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: nwqrp@scn.org (SCN User)
Subject: [9448] NWQRP ARCHIVE SITE
Message-ID: <199606041613.JAA00128@scn.org>

QRP-L Gang,

Thanks to Bill, N7MFB, the NWQRP Club now has an Archive Site available via the World Wide Web.

The index <directory> page is located at:

<http://www.techline.com/~bill/ftp/>

Also, I have created a link to this page from our homepage at:

<http://www.scn.org/IP/nwqrp>

Have fun!

--Brian, KV9X

P.S. The next meeting is this weekend! Sat. 8 JUN 1996 @10am
at Andy's Diner in Seattle ... 4th Ave. S. ... just S. of the
Kingdome. Come in the Back Door.

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i	NorthWest QRP Club	-----
-= [scn] =-		--0---/\--
) (nwqrp@scn.org	/^\^\/ ^^\ --NW QRP--
/_ _\ 	http://www.scn.org/IP/nwqrp	

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: David Adams <dave@flowserver.stem.com>
Subject: [9490] Off again
Message-ID: <9606062034.AA13816@flowserver.stem.com>

Greetings! I'm off to France again (6 weeks this time). Does
anyone know the SSB
allotments (if any) for 40 and 17m? I've sent in for a license and
am considering getting
the cascade together prior to the trip and need to know if it will
be useful.

Dave

David J Adams N9UXU QRP-L #83
dave@flowserver.stem.com NorCal QRP #1442
(415) 813-5028 Flow Cytometry Specialist

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: burdick@interval.com (Wayne Burdick)
Subject: [9500] optimization of station weight/performance for spartan sprints
Message-ID: <v0213055cadd3fce0020@[199.170.106.28]>

As a veteran of one Spartan Sprint, not to mention a zillion attempts at
light-weight backpacking operation, I've learned the same lesson that many

others just did: Don't use the same hulking gel-cell that you use to power your portable refrigerator! This is just one of many flashes of insight that I'll try to stuff into this message. I apologize in advance for the stuff that sounds like common sense.

To foreshadow the optimizations, here's how, given a lot of free time, I'd build a station guaranteed to win the Sprint (assuming good QRP operating skills):

- 40-meter superhet with fixed 200Hz bandpass crystal filter
- all-plastic case, very thin, just big enough for one PCB and battery
- miniature controls and connectors, mounted on PCB to eliminate wiring
- stand all R, D, and RFC up on end and toroids on edge to minimize PCB size
- internal 9V lithium battery and 5 volt regulation (use J309s for muting)
- 1 watt output; very efficient PA (80%+)
- VXO tuning using a crystal above the 40m band (subtract VFO on transmit)
- NE602-based receiver (2.5mA per mixer) and headphones-only AF output
- ultra-lightweight keyer paddle attached to side of the case
- Sony ear bud 'phones
- minimal circuitry for both receiver and transmitter (a la NC40)
- built in miniature keyer/counter (KC1, for example)
- tightly sealed, helium-filled interior (just kidding :)

What Are We Optimizing?

Keep this in mind at all times: SCORE = #QSOS/WEIGHT!

How do you increase QSOS?

This is not quite the right question. The question is, what QSO-increasing techniques add little or no weight to the station? Here are my favorites:

1. Good QRP operating practice

Listen a lot; transmit only when necessary; use slow code speeds if QRN or QRM are bad, etc.

2. Use more power

Sprint rules don't specify power levels so go right on up to 5 watts if your battery will tolerate it (more on this below).

3. Use the biggest possible antenna

Sprint rules don't require that you weigh the antenna. Use a log periodic. Better yet, two log periodics, one for each band. :)

4. Put a narrow filter into your receiver

This is a general point; receiver improvement adds very little weight, so do the best job of it that you can. The easiest way to improve most receivers with garden-variety 500Hz crystal filters is to add varactor diodes to tune the bandwidth over a broad range, usually 150 to 1500Hz or so. Or you can add an audio filter, which can be very sharp (careful--some receivers are tricky to modify because of differential signal paths in the A.F. stages). Even an outboard DSP-based filter could be weight-efficient if packaged in a small enclosure.

5. Go where the stations are

This is a short-duration contest. No sense killing yourself trying to work 20 meters if it's closed and 40 is open.

6. Use a really BIG log--bigger the better--since this isn't counted in the total

Give yourself LOTS of scratch paper, and a few of those hefty, real ink pens your grandfather left you. Doodle, paint, and by all means drink beer (also not counted) as your micro-miniature contest keyer does the work. Let the dog sit in your lap. Wear comfortable clothing. Remember: you're *inside* the house during Sprints.

How do you reduce weight?

This is where the fun comes in. But before you start reducing weight by removing the aluminum panels from your rig, remember the goal of the Sprint: to use the same gear that you might use in the field. I think this implies that the gear should remain field-worthy, and removing all of the case parts would in my mind be cheating. I'd also discourage disassembly of the battery.

Here some ideas for getting the weight down without violating the Field Worthiness criteria (unofficial, of course).

1. Use the smallest possible battery

For example, you can power a NorCal 40A from a 9V lithium battery if you replace the 8V regulator with a 6V regulator and re-set the AGC level control. You'll get only about 1 watt output, max, but the reduction in weight is truly remarkable.

The typical 1AH gel-cell is ten times the weight of a 9V lithium battery. These batteries are not rechargeable (yet) but for \$5 you get 1200mA in the same size package as an alkaline! You'll want to keep the transmit-mode current drain down to about 150mA to avoid stressing the battery. This is a DC input to the final of about 1.2W.

Before the Sprint, test your battery under contest conditions to see if it will last the full two hours. The most important criteria here is that the voltage not drop so low as to cause chirp, VFO drift, or MUTE circuit failure. Confirm the minimum non-chirp voltage, in particular, using a separate receiver (before the contest).

Power output reduction will be fairly linear with the voltage decrease, and may actually be less important if conditions are fair to good. (Remember, QRPers will try really hard to work you at *all* power levels, and QSOs have been made at microwatts.)

2. Use a small, single-band rig if one band is closed

Take a listen to 20 and 40 just before the contest and choose one or the other IF you think it's worth the risk. This will significantly reduce the weight over, say, an HW9 or other big multi-bander. (Rigs using band modules are an exception. Example: each Sierra module weighs around 1 ounce. A rig that uses a bandswitch and has all of the components for all bands built in will weight more.)

3. Use a tuned antenna

Tuners frequently outweigh the rig itself, and they ARE included in the total. So, if you must use a tuner, build it into a small box. You can probably get away with a plastic box if you're using an end-fed random wire, given that stray RF radiated by the tuner will be dwarfed by radiation from the wire itself.

4. If your keyer is external, leave it on the shelf

Most contacts will be made at slow speeds, and the duration is only two hours, so a small, lightweight handkey is in order. The handkey can be physically mounted on the rig as a base.

5. If you normally use a Bencher or other Really Heavy Key, leave it on the shelf, too

There are keyer paddles availble that weigh only an ounce or two, or you can make your own and attach it to the rig.

6. Eliminate or reduce the size of accessories

The most obvious examples are external speakers, SWR bridges, and wattmeters, all of which are often packaged in heavy steel enclosures. If you do need continuous monitoring, roll your own; you can make an SWR bridge that weighs just a couple of ounces, especially if you build it into the rig.

7. Use a 40-9er (just a few ounces?)

The jury is out on whether this is a good idea. You'll probably want to add an audio filter.

Conclusion

Something tells me we're going to see an order of magnitude increase in QSOs/pound over the next couple of months. The techniques above are a good start. I'm sure many of you have other ideas--please post them!

The most important point is that you're really competing against yourself more than against others. My goal is to improve my score each year, thereby becoming more adept at preparing for *real* field operation.

73,
Wayne Burdick
N6KR

ARS #2 NorCal #3

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: litigate@mi.net (litigate)
Subject: [9494] Price for 509 w/accs
Message-ID: <199606062153.SAA10542@mi.net>

With respect to the Argonaut 509 and accessories I listed last night, the desk mic has been sold. I'll sell the 509, filter and calibrator as a package for \$335 US shipped anywhere in North America. I'm also open to offers on one or more of the items. I'd also trade it for a Yaesu G-5400B satellite rotator. 73.

Rick Williams VE9HF
472 Broad St.
Fredericton, NB
E3A 5L1
CANADA

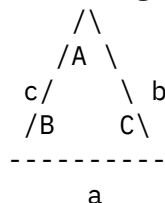
(506) 458-1310 (H)
(506) 444-6551 (W)

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9474] Right-Angle deltas (ETC.)
Message-ID: <Pine.SOL.3.91.960606113956.16699A-100000@utkux4.utcc.utk.edu>

Right-Angle Delta Loop: Side-Fed

Sorry, but I lied. Just could not resist trying out a different version of the delta loop on the modeling machine. What a surprise, and worth bringing to the attention of delta-contemplators.

Let's keep this much the same: #12 copper wire, medium S-N ground. But let's change the look of the delta from its equilateral triangle shape that we have been investigating. Using a bottom wire and an upward apex, let's change the angle of the apex from 60 degrees to 90 degrees. Sort of like this:



Now this will look different on each screen, and even more different on the printer, but let angle A = 90 degrees, and angles B and C = 45 degrees. A resonant length for 7.15 MHz on the modeling machine gives side lengths this way: Side a = 60.8'; sides b and c each = 43.0'. The total antenna height is 30.4' from bottom wire to apex, which may let you raise the antenna a bit higher for a fixed tall antenna support--and that would be good.

Now let us consider only the use of Side-feeding to get vertical antenna benefits from this arrangement. Go 1/6th the way up one of the sloping sides and feed it there. (That is 7'2" on this 7.15 MHz model, but +/-6" will make very little difference, although it may affect the feedpoint Z.)

Now, on the equilateral triangle version of the delta, the feedpoint impedance was relatively constant wherever we fed it--between 110 and 140 ohms, which is a quite narrow range. Not so on this version. Feed the antenna at the middle

of the bottom, and its Z is about 200 ohms.

But, feed this version at the 1/6th-up-the-side point, and you can feed it with coax. See the table below. Use a 1:1 balun if you like. How you prop up the connection is a matter of individual ingenuity.

But, being flatter, it will perform poorer than the equilateral delta used as a side-fed vertical at the 25% point, said the reasonably skeptical thinker about antennas. But sometimes with antennas, thinking will get you in trouble. The right-angle delta performs a little--not super much, but a significant amount--better than the equilateral delta in this configuration. Let's look at some modeling outputs:

Height in feet		Gain (dBi)	degrees	degrees	Std Delta	
Bot ht	Top ht		T0 angle	BW	[gain	T0]
35	65.4	1.97	16	23	1.39	15
25	55.4	1.97	18	28	1.44	17
15	45.4	1.77	21	34	1.28	20
10	40.4	1.57	23	37	1.12	21

Note that for any bottom height, the equilateral version will be about 11.5' taller. For a given anchor mast/tower/tree/etc., you can now raise the baseline horizontal wire by that much--and 10' of further elevation helps either the gain or the T0 angle or both. The BW=beamwidth, the vertical width of the radiation pattern to the points either side of maximum where the power drops to 1/2 maximum. Note that it is narrower (with less high angle radiation or receiving interference to dx) as you place the antenna higher. (The standard delta exhibits the same increasing beamwidth as the baseline height is lowered.)

The gain is broadside to the face of the delta. To the edges, the gain is down 4 dB or so. The pattern makes a nice oval when viewed from on top (azimuth pattern). So have a pair of favored directions (or use an omnidirectional vertical).

The feedpoint impedance is about 50 ohms roughly resonant at the 35' baseline height, about 56 ohms at 25', 69 ohms at 15' and 79 ohms at 10'. Baseline height and exact position along the sloping wire, counting from the bottom wire upward, will play a role in the exact impedance, but coax ought to do the trick.

I did not invent the 90-degree delta--Moxon makes reference to this shaping in his book--although analysis is confusing. Moreover, some folks who have claimed to use coax to feed deltas have probably flattened them into right-angle versions--or something close.

Will this antenna work? All I can say is that it should, but I cannot say for certain that it will. In fact, it may even be covered in ON4UN's book (which

is not at hand as I look this model over). So who will try it--or discover they have tried it due to backyard limitations? Remember, in this application, keeping the delta upright (vertical) is important--and getting as high as feasible is also beneficial. I'll look forward to hearing about experiments.

Now I really will go on vacation and give deltas a rest. (Famous last words.)

-73-

LB, W4RNL

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996

From: Art Searle <asearle@netusa.net>

Subject: [9454] Shooters

Message-ID: <31B6E84F.6BF3@netusa.net>

Kerry W. Miller wrote:

>

> At 10:50 PM 6/5/96 -0700, you wrote:

> >I especially apologize to Monte, now everyone knows we're shooters.

> >

> >> 72, de Art

> >

> Art,

> You guys aren't the only ones! I've been shooting since I was a

> kid, it's part of the reason I moved to the country. I can shoot out my

> back door if I want to, sometimes even get together with neighbors and shoot!

> Not a life member, but still a member - "I'm the NRA"! QRP

> shooting=.22! Cheap, quiet, and my daughter even likes it. I got an SKS

> last year, seemed like a fun toy. Now my wife shoots it because it doesn't

> kick!

> 73,

> Kerry

22s? I guess it still goes pop. Even my 12 year old gets bored with 22s. Monte KU7Y and I are 45 ACPer. My Les Baer custom is my favorite gun and the most accurate thing I've ever shot. I don't know if you've ever shot a 45 but they don't kick, like their reputation says. They are a lot of fun to shoot. My wife shoots to and she hates 22s. But then she is the best shot I know, even with a 45, and she likes big calibers. She is small, 5 feet tall and 110 pounds but she (we both do) works out and is very, very strong. She is also an NRA Certified Firearms Instructor. There I go bragging about the wifey again.

72, de Art

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "John F. Mc Clun" <mccclun@clark.net>
Subject: [9499] Special event station
Message-ID: <31B7AF84.3627@clark.net>

Gang -

Well two days of new inverted 30M stealth Vee antenna and I have 5 contacts now. The last contact tonight was with K96BAI at 500 mw. Not only does this give me the illusive 1000mi/watt award but I get a special QSL to boot. Listen out for these stations over the next several months they have a distinctive call you think it's too long or he doesn't know what number to send. The antenna works great into Ga,NC,Fla,Me,RI but I want to west. Maybe I'd better try and turn it a little, would that help? Let's see LB answer that one...(its up 35 ft, slopes down to 8 ft above grnd, arms are oriented exactly 270 - 90 degrees, whats the pattern guys?).

John N3REY
Always QRP!

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Nick Franco <kf2ph@bnl.gov>
Subject: [9479] Thanks - Butternut HF6V Help!
Message-ID: <31B7096B.124A@bnl.gov>

What a group. In a matter of minutes I received several helpful replies to my request for assistance. I did have to change my shorts from reading Nils' lightning warning reply, but hey, a couple of pairs of briefs is still better than replacing a house if I wasn't warned :)

Thanks to all for the help. I think I can get everything going fine now and I have some confidence from all the replies.

BTW: I did work OM3EY last night about 12:30 or 12:45 EDT as my first contact with the Butternut with the wrong size matching line and the mast just stuck in the ground for testing. I used my NW40 at 5 watts on a dead band. I think we'll get along just fine, this HF6V and me, and

my NW40!

BCNU es TNX Again,
Nick

--

Nicholas J. Franco <>< BROOKHAVEN NATIONAL LABORATORY
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Email: kf2ph@bnl.gov <http://www.rhichome.bnl.gov/People/franco>

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Russ1031@aol.com
Subject: [9480] The First Spartan Sprint
Message-ID: <960606124711_129206526@emout16.mail.aol.com>

The first Spartan Sprint, held on Monday evening, was a most interesting challenge, with Mother Nature providing the fireworks. I'm extremely proud of the QRPers who showed what a couple of watts can do in the face of some pretty fancy QRN. Thanks so much to those who participated and e-mailed me their logs.

Here are the e-mailed results, in descending order of Qs per pound.

Reed, N7ZDA (7 Qs, 2.0 pounds)--3.50 Q/P
Russ, AA7QU (13 Qs, 3.8 pounds)--3.41 Q/P
Dennis, KQ6AG (9 Qs, 3.72 pounds)--2.42 Q/P
John, AB6DG (5 Qs, 2.6 pounds)--1.92 Q/P
Wayne, N6KR (5 Qs, 2.8 pounds)--1.79 Q/P
Richard, KI6SN (9 Qs, 6.5 pounds)--1.38 Q/P
Mal, AA7WT (5 Qs, 4.6 pounds)--1.08 Q/P
Walt, KB2JE (7 Qs, 7 pounds)--1.00 Q/P
Bill, KD7S (9 Qs, 12.5 pounds)--0.72 Q/P
Mike, WB4ZKA (6 Qs, 10.6 pounds)--0.57 Q/P
Randy, KS4L (7 Qs, 14.9 pounds)--0.47 Q/P
Joe, KC7NEV (6 Qs, 14.7 pounds)--0.41 Q/P
Bill, K5ZTYY (6 Qs, 17.5 pounds)--0.34 Q/P
Randy, WB5QMP (3 Qs, 9.8 pounds)--0.31 Q/P
Richard, WD6FDD (3 Qs, 10 pounds)--0.30 Q/P
Kent, AB7OA (3 Qs, 10.1 pounds)--0.29 Q/P
Steve, N2MNN (1 Q, 4.7 pounds)--0.21 Q/P
Duffy, KK6MC/5 (9 Qs, 65 pounds)--0.14 Q/P
Brian, VE3VAW (2 Qs, 17 pounds)--0.12 Q/P
Mike, KR4IT (2 Qs, 17.5 pounds)--0.11 Q/P
Bob, KI7MN (1 Q, 12.5 pounds)--0.08 Q/P

I wonder if we gave 20 meters an adequate chance. I had three solid

contacts with the East Coast right at the start of the Sprint, and then ran out of stations. But the band stayed open for at least another hour. For example, just about every time I checked 20 I copied Randy, KS4L (whom I'd already worked) loud and clear. Duffy, KK6MC/5, had a similar experience on 20.

The first Spartan Sprint has now given us something to aspire to--station weights in the range of 2 to 4 pounds, and N7ZDA's impressive QSO per pound ratio of 3.50. I'm on the edge of my chair for the next Sprint!

Here are some excerpts from the soapbox:

>From Richard, KI6SN:

Frankly, I was amazed that the combined weight of this gear is more than 6 lbs. Obviously, got to put this contest station on a diet. At the outset, I knew the Yuasa battery was going to be a killer load. So instead of using a heavy Bencher paddle, opted to shift to a very, very lightweight iambic paddle from Galbraith Projects sold in conjunction with the New Zealand Association of Radio Amateurs. Properly packaged, it would be a great paddle for backpacking. I don't know if Galbraith is still making this paddle, but I'll find out

>From Wayne, N6KR

I just barely got to operate in the Sprint due to work and appointments late in the day.

Here's how I did it:

--from my Mazda, in the parking lot
--using a ham stick on 40m
--and the Sierra

I'll post the weights later on, but it was pretty low--under 4 pounds, I believe. I didn't weigh log or my ballpoint. :)

Total of five QSOs, some very hard-won. Best DX was Montana.

>From Reed, N7ZDA:

Fun event. My stats for the 6/3/96 event follow:

Contacts: 7 CW

Station: Mizuho 40M CW/SSB Rig (size of HT with batteries inside)

Weight, as operated:

1.1 lbs	Mizuho (with batteries removed)
0.4	Batteries (7 Nickel Hydride)
0.0	Key (No external key. Used button on rig.)
0.2	Antenna matching unit (Custom, wound on pill container.)
0.3	Wire (Half wave zepp, tossed up into trees.)

2.0	Total weight

>From Randy, WB5QMP:

For the second SP, I'll cut the battery weight in about half with a 4.5 Ah cell compared to the current 6.5 Ah, cut the headphones by more than half by using an earphone, and use a straight key to lower the 2.9 lbs Bencher.

>From Dennis, KQ6AG:

Total equipment weight: 3.72 pounds

Equipment description (weights from a fancy digital scale at post office):

Wilderness Sierra, with 1 band module (40M) - 1.49 Lb.

2 amp-hour gell cell, 2.11 Lb.

Power cable, .03 Lb.

"In your ear" type stereo phones - .04 Lb.

Homebrew straight key - .05 Lb.

Used resonant Hamstick vertical antenna mounted on patio awning, with radials. (No tuner used).

Soapbox: As usual, I waited till the last minute to get ready. Finished building my key 1/2 hour before the contest, and then found that the 8 nicad cell pack (from my R/C model airplane transmitter I have not used for a year, since I got into ham radio) did not hold a charge, so I had to use my heavy gell cell. Definitely need to make a light battery that will just last 2 hours. Did not get around to building a dipole that I could use without a tuner, so had to use my hamstick mobile antenna, mounted on the patio awning. I didn't hear any one in the contest on 20M, so only used 40M. Had alot of fun, and discovered I need to practice with the straight key. Look forward to being /PQ in a future sprint.

>From Mike, WB4ZKA:

Other commitments only allowed 1 hour of operation. Summertime storm activity (somewhere over the horizon) made plenty of QRN

challenge. Rich, KI6SN was relentless on 40m, always there calling or being called. Lots of fun!

>From Bill, K5ZTY

Well, Here's my log Russ. the noise on 40 was terrible here in TX so had to do a 20 mtr entry. Then 20 closed up about 9:15. I made 6 contacts, all on 20, using my TS830-S which weighs 13 1/2 lbs and a AEA MM3 keyer that weighs 1 1/2 lbs and a Kent paddle that weighs 2 1/2 lbs. (I weighed them all)I didn't use a tuner on 20, the antenna is resonant.

I told friend of mine that is a QRO contester about the Spartan. His comment was, "You guys need professional help". I only found out about the contest a few hours before it started, so I didn't have time to get my portable light weight stuff all hooked up. Next time I'll use real QRP eqpt.

>From Bob, KI7MN

This ought to be good for a laugh...1 contact with WB4ZKA, 5NN, AZ, 5 Watts. Equipt weighs 12.5 lbs. Lots of qrm/qsb/qrn but fun trying.

BTW, Mike lives about 6 blocks from here, so it was ground wave all the way!
73,

>From Brien, VE3VAW:

Glad some people thought there was too much qrn for this too work, makes me feel better about my 2 contacts tonight. I am quite interested to see how well people did. I will try again in July, which will be the Monday ending our long Canada Day weekend here.

>From Mal, AA7WT

Lots of QRN and fun. I made 5 qso's with a station that weighs 14.6 lb. Looks like I need a lighter power supply (Power Station) hi. I worked 40M with a Norcal 40 and an inverted vee (45 feet at the apex). CU in July!

Thanks again for your participation and a rewarding launch of the Spartan Sprints. I'll see you in the next sprints on July 1. (Note: July 1 is on the the standard date for the Spartan Sprints--the first Monday of each month.)

72, Russ, AA7QU, Contest Manager and general purpose gofer, Adventure Radio Society

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9458] The omega on deltas (yup, long, erase, etc.)
Message-ID: <Pine.SOL.3.91.960606080159.14882E-100000@utkux4.utcc.utk.edu>

Compare the delta loop to what?

IF one can get the bottom of the antenna above about 15' or so on 40 meters, the APX version appears to make a good all-round antenna for both short and long hauls. For lower bottom-wire installations, the D25 (fed 25% up one sloping wire) offers dx potential compared to other low installations of the delta. Although its gain is low, its reduction of signal (both in and out) at higher radiation angles suggests that it might achieve a superior signal-to-noise ratio on signals at low angles (dx). However, it is not likely to be a sweepstakes or field day winner, where all one wants is US (although it might be useful on one or the other coast).

All of this preamble is background for suggesting that the appropriate comparisons among antennas for the low-installation of a delta loop would be various types of vertical antennas. So I modeled a bunch--quickly, so the results are only indicative and no where near absolute. All the verticals used 1.5" diameter aluminum. If they had radials, they were #18 wire (although changing the radials to #12 made no difference). All antennas with radials used 4 27.5' sloping radials, simulating a roof-top installation. (I did not model a ground-mounted vertical, since their efficiency depends on the quality of the radial system--at, above, or below ground.) All antennas were placed over a medium S-N ground.

Here is a run down of the models:

- | | |
|---------|--|
| QW-2030 | A full size quarter WL vertical with 4 radials sloping 30 degrees and a base height of 20' |
| QW-2530 | A full size quarter WL vertical with 4 radials sloping 30 degrees and a base height of 25' |
| QW-3530 | A full size quarter WL vertical with 4 radials sloping 30 degrees and a base height of 35' |
| QW-2545 | A full size quarter WL vertical with 4 radials sloping 45 degrees and a base height of 25' |

QW-3545 A full size quarter WL vertical with 4 radials sloping 45 degrees and a base height of 35'

QWL2530 An 18' vertical over 30 degree radials, with a mid-length loading coil (Q=300) to simulate trap verticals (roughly)

VDPL66 A full size vertical dipole about 2' off the ground at the bottom.

VDPL3625 A vertical dipole about 36' long, fed in the center at the 18' mark (which was 25 above ground) and loaded in each leg's mid point to simulate (roughly) commercial vertical dipoles.

VDPL3635 A vertical dipole about 36' long, fed in the center at the 18' mark (which was 35 above ground) and loaded in each leg's mid point to simulate (roughly) commercial vertical dipoles.

Here is a table of results, compared to old D25, our 25% up the leg delta loop at 10' and 35' over ground at the base. Feedpoint Z is omitted due to the roughness of the models.

Antenna	Gain (dBi)	Max Radiation angle (degrees)
D25-35'	1.39	15
D25-10'	1.12	21
QW-2030	0.45	21
QW-2530	0.57	19
QW-3530	0.70	17
QW-2545	0.62	19
QW-3545	0.83	17
QWL2530	0.55	21
VDPL66	-.07	18
VDPL3625	-.55	22
VDPL3635	-.22	19

First, do not worry about the negative gain numbers. Remember that gain in dBi is relative to an isotropic radiator, and a negative gain means that an antenna would have less radiation in the direction of interest than an isotropic radiator--less, but not none. Many antennas with negative gain numbers do work.

The patterns of all these antennas are similar: nothing going straight up or close to straight up, and everything outward at relatively low angles (roughly between vertical angles of 10 degrees up to 45 degrees). The higher base antennas have slightly lower overall lobe angles than the lower base antennas.

If you were expecting larger numbers for vertical antennas, these numbers may surprise you. Antennas many wavelengths above ground (like a 2-meter ground plane, etc.) are effectively isolated from real ground effects. However, on

40 meters, ground reflection and absorption, even beyond the limits of a ground plane, play a big role in the far field strength. You can get artificially high numbers by placing these same antennas over "perfect" ground, but unless you plan to copper plate your entire yard and to keep it polished (or some equivalent), you cannot achieve those numbers.

So, with models of real antennas over simulated real ground conditions, the advantages of the D25 begin to show. Its max gain over the verticals is real and can reach up to 2 dB (almost half an S-unit, which can make a difference is weak signal snagging). Remember that the D25 is bi-directional broadside to the antenna plane: this is where it gets its gain over the omnidirectional verticals, and off the sides, the gain drops a few dB.

These results do not mean that the verticals are poor antennas. Rather, in putting up a Butternut, Hustler, 14 AVQ, R-7000, GAP, etc., we give up a little gain to get multi-band omni-directional performance. But the delta remains cheaper. Proving once again that there is no magic in antennas: to get something you give up something else. So, in your planning, always ask yourself: what do you want? what are you willing to give?

I suspect that this is now more than enough on delta loops. wish I could have shown patterns on e-mail, but that would also have made each message much longer. Enjoy building your loop while the weather is good. I think I'll take a small vacation. (I heard those sighs of relief from the disinterested. . .)

-73-
LB, W4RNL

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Mike Cloud <cloudm@mhsgate.meth-mem.org>
Subject: [9466] Things QRP-Like
Message-ID: <609DB63101172C16@mhsgate.meth-mem.org>

After completing the painting of the ENTIRE house (2 story, erzatz English-Tudor, wid tons of cutting-in work), I rewarded myself and my son my attending an outdoor activity festival here in Memphis. While things tend to be very conservative (read regressive) in this area (I know 3 guys named Bubba, and a lot of ole'boys with strange monikers) with a strong emphasis on high-power guys, tree-stands, duck-blinds, and ATVs (all designed to destroy and surely damage the natural flora and fauna, one thing caught my eye. It seems that the US Olympic Air-gun

Match Team set up
a little stand selling pins, shirts, hats, etc. trying to raise money for their
cause. They were
working in conjunction with a big air-gun manufacturer demonstration (Beeman, I
think) who had a
air-gun range setup. They were begging for people to try their hand (finger,
arm?) at the target
range while, the assault rifle/bazooka (no, not the RF-type bazooka) guys/girls
were taking
reservations for next year for their demonstration. I couldn't help but give it a
try. Having
shot at least 10X my weight in BBs thru my childhood years, I thought the skills I
developed would
serve me well. I gotta tell you, that when I picked up and fired my first quality
air-rifle, I
experienced that zen-like, karma-reducing feeling I experienced with my first QRP
experience.
Somethings right about this stuff fellow QRP-ers (I initially said guys, but then
I remembered
Laura, hi hi, hello Laura). There is a lot of skill/centerness to be had here,
somewhat akin to
the skills needed for good qrp operation. Subsequently I discovered that there is
a local air-gun
club. I plan on attending a couple of their meetings to see if their membership
has a
similar aura to qrp'ers. Thoughts, Ideas? cul, 73.72 de Mike, KR4IT

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "JOHN F. McCLUN" <JFM001@DENTAL3.AB.UMD.EDU>
Subject: [9456] TMPS
Message-ID: <199606061155.HAA16454@comm1.ab.umd.edu>

Gang-

Well I finally was able to provide my QRP+ with the antenna of it's
dreams in a convenient restricted housing developement. I
researched the booklet very carefully and then realized - FLAG
POLES were not covered or mentioned! I now am the proud owner of
a 35' flag pole in the middle of my back yard, guyed (read inverted
V's) with multiple guys to ensure no property damage to the
neighbor's lots. I had my first 30M QRP (3 watts) QSO last night to
middle Ga. and he gave me a 599+. Well, at least I know it gets out in
one direction - south. I think I'll turn the guys 90 degrees so the side
is to the E/W and see if I can give Chuck Maryland.... listen up Chuck
for the 599+ signal beaming your way (hi).

But seriously, it does pay to read those covenants for what they left

out - like my flag pole, wires from the house to the shed to provide power (sure, that little wire carries 120v @ 20A, neighbor), or maybe you may have to wire your tree together because of disease in the limbs.

In my case the neighbors know better than to complain about the flag flying high, my rifle sits in the back window of my truck which is also covered with a flag decal. And I'll shout any commie pinko who doesn't like the flag. Here John, take this pill, you'll feel better real soon.....

John N3REY
Always QRP! (and sometimes sane)

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9459] updated periodicals list
Message-ID: <Pine.SOL.3.91.960606082624.17135B-100000@utkux4.utcc.utk.edu>

I have just updated the periodicals list with new addresses for NWQRP and CQC. get a copy via e-mail from LISTSERV@LEHIGH.EDU with the text
GET QRP-L/BOOKS PERIODICALS.LIST

Reminder #1: If your club has changed addresses or personnel that may be on the periodicals list, please let me know, so that I can keep the list as current as possible. If your club has a periodical and is not listed in the periodicals list and would like to be, look at the current list and send me equivalent data on your club's periodical.

Reminder #2: If you have been spending all your time reading about delta loops and building them and have forgotten to renew your subscriptions/memberships, please do it now. Support to the best of your ability all QRP organizations and periodicals that you can--and benefit from what you read and learn in return.

-73-
LB, W4RNL

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: john dorson <jdorson@bbs.mpcs.com>
Subject: [9498] vanity call signs
Message-ID: <199606062330.TAA26801@bbs.mpcs.com>

I just delete by mistake a posting regarding someone rec'ing their old call vanity call sign. can someone give me that info.

thanks

John KA2GYH hoping to get my old one back K2JHU

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: DYARNES@aol.com
Subject: [9469] Vanity Licensing--It Works!
Message-ID: <960606102723_129118426@emout15.mail.aol.com>

Hi gang,

According to the UALR callsign server, my vanity licensing application to get my old call reassigned was processed yesterday, 6/5/96. I am now W7AQK again. My old call, W5RMZ, still shows under my name but when I pull up W7AQK it shows my name now and a new expiration date. It also notes my previous call. I'm sure I am not the first to be processed, but I haven't seen anyone else making any similar announcements. Anyway, good luck to those of you waiting for your applications to be processed.

By the way, I did not see this action on the license issuance summary page that UALR allows you to link to. I had been watching that page as well. So far, none of the vanity licensing applications seem to be showing up on that page, but I suspect they will shortly. I'm not sure how the UALR database is updated, but it obviously is getting it's info somewhere. C U.

72 de David W7AQK

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: DYARNES@aol.com
Subject: [9473] Vanity Licensing-call lookup
Message-ID: <960606112348_129152436@emout15.mail.aol.com>

Somebody contacted me about the database for looking up vanity licensing activity--I think he was looking for K3UFN--anyway, if that is the call, it hasn't been issued yet. I screwed up and deleted his message while I was checking to see if his call had been issued. The U. of Arkansas-Little Rock database can be accessed at:

www.ualr.edu/doc/hamualr/callsign.html

Sorry for the bandwith, but maybe enough of you are interested in getting

the UALR address.

72 de David W7AQK (formerly W5RMZ)

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: k5zty@hamgate2.w5-f6cnb.ampr.org
Subject: [9451] ZUNI LOOPERS FD CALL??
Message-ID: <7374@sugarland.ampr.org>

Does anybody know what the Field Day call is going to be for the Zuni Loopers? I want to look for them and any other QRPers during Field Day. I am FD coordinator for my local club this year so won't get to do a QRP FD this year. I would like to post a list of QRP FD calls at our CW station so we can listen for them.

If you are running a QRP FD, post your call here. If we know who you are, we can give you the proper 559 STX instead of the QRO 599 STX.

72

Bill, K5ZTY

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "Paul R. Valko" <prvalko@Oakland.edu>
Subject: [9464] Re: Are you running FD QRP, or QRPP?
Message-ID: <Pine.OSF.3.91.960606092356.8998B-100000@saturn.acs.oakland.edu>

> Call : WA8Z

> Group : Utica Shelby Communications Association

> Location : Romeo, Michigan -- near 30 Mile Rd and M-53

> Expected Class: 17A {That's not a typo, SEVENTEEN ALPHA!}

> Personal name : Last year there were about 250 attendees

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9477] Re: Are you running FD QRP, or QRPP?
Message-ID: <199606061519.PAA00394@chuck.dallas.sgi.com>

Paul's posting is correct!! 17A for FD. For those that may not know, that's 17 simultaneous stations on the air all battery powered and all QRP. Now that is a serious effort.

I can just see it now. Zuni Loopers vs. USCA for the "little pistols" during FD. :-)

It is very important that Paul R. "Paperback Writer" Valko and his group document and report back to us how to minimize RFI between rigs on the same band (CW vs. SSB) and even between bands. I've heard all the arguments of having stations on the same band with antennas colinear, i.e. end-to-end separated as far as possible or others saying have them at 90 degrees to each other.

17 stations within a 1000' radius is an interesting geometry problem.

K5FO/C6A

--

Chuck Adams (K5FO CP-60) adams@sgi.com

K5FO TMPS 1996 Qs=022 States=16 Confirmed=07 DX=01

AZ CA CO FL IL IN MI OK OR SD TN TX UT WA WI WY

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "Warren E. Lewis" <saswel@unx.sas.com>
Subject: [9489] Re: Are you running FD QRP, or QRPP?
Message-ID: <199606061933.AA17691@cardamom.unx.sas.com>

>

> Paul's posting is correct!! 17A for FD. For those that may not
> know, that's 17 simultaneous stations on the air all battery
> powered and all QRP. Now that is a serious effort.

Our group Raleigh Amateur Radio Society (RARS) usually runs between 7A and 9A. I thought our effort was big!! I can't imagine being able to put 17 stations in a 1000' circle without major interference problems.

> It is very important that Paul R. "Paperback Writer" Valko and
> his group document and report back to us how to minimize RFI
> between rigs on the same band (CW vs. SSB) and even between
> bands. I've heard all the arguments of having stations on
> the same band with antennas colinear, i.e. end-to-end separated
> as far as possible or others saying have them at 90 degrees
> to each other.

Our group is a QRO group so the problem of in band and harmonic band interference is a major problem. This year we are using some ICE band pass filters to reduce the out of band interference. And we are going to try and make sure each band has at least a vertical and a horizontal antenna arrangement so we can try and keep in band interference to a minimum.

I look forward to hear how they keep from driving each other crazy with 17 stations going at once.

I guess part of it depends on the attitude of the effort, social vs. competitive vs. mix of the two.

The RARS group is pretty competitive and we want to get as many Q's as possible, so, the interference problems may affect us more than a more social group.

I look forward to hearing how folks deal with the interference problems.

cheers - Warren

AD4ZE TMPS 1996 Qs=019 States=12 Confirmed=02 DX=02 MM=01
MA AL MS FL IN IL TX NY CT NJ NH NC
--

Warren E. Lewis	saswel@unx.sas.com
Technical Support Division	(919) 677-8001 x6542
SAS Institute Inc.	PP-ASEL
Cary, NC	AD4ZE QRP-L#78 DOD#0021

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [9471] RE: Excessive drift on EXP2
Message-ID: <199606061451.KAA80601@nss2.CC.Lehigh.EDU>

I too had high O/P on 40 m and could get 5 Watts into a dummy load. As the drive was increased, the power came up smoothly and there was no sudden increase so I presumed that nothing was amiss. I turned the drive down until it read 3 watts on the wattmeter and have made lots of contacts since .
The VFO also had some drift to it and could not tune down to 7.000 mhz. By the time I had finished changing caps and coil to get the tuning range I wanted, all seemed to be ok and the rig works well.

Temperature has a big effect on almost any similar type of vfo,
so if you have been soldering around the VFO then give it at
least an hour to get back to normal before measuring drift.
I put a freq counter on the vfo and after I'd soldered, waited
until the freq stopped drifting down. I noted the frequency ,
then switched the rig off for a couple of hours. When the rig was
turned on again, the new frequency readout showed how much drift
would occur.

72 Jim VE3DDY

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Dick G0BPS <Dick@kanga.demon.co.uk>
Subject: [9455] Re: Haggis, breakfast of champions!
Message-ID: <1q5xRKAuuErxEwhu@kanga.demon.co.uk>

In message <19960604.105123.4391.1.k7yha@juno.com>, "Richard H. Arland"
<k7yha@juno.com> writes
>Shame on 'ye, lad.
>A wee bit 'o haggis is good fer 'ye.!!
>
>GM30XX and GM4JJG managed to bring three of them to my surprise 37th
>birthday party held at G3RJV's QTH a few years back. Jo Dobbs had them
>a'boilin' away in the kitchen....thought something had crawled inside
>the house and died!
>
>After being thoroughly humiliated by Ronnie, GM4JJG, because I coudna'
>recite Bobby Burns' Ode to the Haggis, he promptly did the honors and
>the feast was on. I guess, after copious amounts of single malt Highland
>Whiskey,

WHISKEY ??? WHISKEY ???? What the hell is that ???

The real stuff from Scotland is a 'Single Malt Whisky'

The other Whiskey stuff comes from strange places like Japan and
Kentucky .

>my Highland heiratage (sp) got the better of me.....the haggis
>was REALLY good! Honest!
>
>72/73 rich k7yha (ex G5CSU)
>
TTFN de ...

Dick G0BPS / G0R00 <http://ukinternet.com/ham/kanga>

Kanga Products

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From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [9447] re: Haggis, etc, etc, etc,
Message-ID: <Pine.SUN.3.90.960605232933.29369C-1000000@vortex.sage.dri.edu>

On Tue, 4 Jun 1996, robert bowman wrote:

>
> if not, be advised that the annual western Montana Testicle Festival will be at
> the Rock Creek Lodge on the third weekend of September. bring your plates
> and tankards.
>

Hmmmmm, now that sound like one of the best special event stations
I ever heard of.....just think of the prizes for stations working
you on the most bands, modes, least power.....

(Will you be at WIMU96 ?)

cul,

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: JEVERHART@cayman.vf.mmc.com
Subject: [9465] RE: Help - Butternut HF6V
Message-ID: <960606093637.2520fe81@carib.vf.mmc.com>

Nick,

The line you are referring to is a quarter wavelength (at 20 meters) of 75 ohm
coax. For RG-11 or RG-11A, I calculate the length to be

$246 / F(\text{MHZ}) \times VF = 246 / 14.15 \times .66 = 11.47 \text{ ft or } 11' 6''.$

For RG-11 foam, the VF (velocity factor) is 0.8, so the length would be 13.9
ft or 13' 11".

Since the antenna is "long" on 20 meters, the feedpoint impedance is about 100 ohms, so the quarter wave line transforms this to about 50 ohms. It is absorbed into the antenna impedance on the other bands.

Be sure to seal the coax VERY well (yes, I'm shouting) on both ends with that black rubbery goo type tape that RS and other sell (brand name Coaxseal?).

Good luck and 72/73,

Joe E., N2CX

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9475] Re: Help - Butternut HF6V
Message-ID: <Pine.SOL.3.91.960606114149.16699B-100000@utkux4.utcc.utk.edu>

Nick,

I used a chimney mount for a 14 AVQ long ago. Only advice I can give is to be sure you run a ground braid from the mounting framework to a good ground rod at the house base. This is mostly to bleed off static charge and keep it out of the receiver transistors, although some folks will speak of other functions also. Also, try to be sure that there is a DC connection between the hot side and the ground side of the line--if the system does not have one, put an RF choke across the line at the base of the antenna to ensure a static bleed path from antenna to brai.

Hope this is useful to you.

-73-
LB, W4RNL

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "'AB7HI' Stephen Lee" <slee@u.washington.edu>
Subject: [9476] Re: Help - Butternut HF6V
Message-ID: <Pine.A32.3.92a.960606083003.22915A-100000@homer31.u.washington.edu>

This is from memory, Nick. Try 11 feet, 3 and 2/3 inches.
I cut one 11 feet, 3 and 3/4 inches which worked out just fine.
I'll check my records at home tonight. If I'm wrong, I'll post the correct dimensions at that time. (around 03:00 UTC)

BTW: I used Belden RG-59/U to make the second matching stub.
This one is easier to pack for taking camping. I've
connected this length of 75 ohm coax directly between
the antenna and a QRP+, NorCal40, NorCal40A, and an
OHR Explorer 30.

With the HF9V there was another stub included which was optional
for tuning up 15 meters. My 15 meter band tune up was good
without it so it ended up in the attic. I never measured the
dimensions of this stub but it was short...about 3 feet or so.

Good Luck!

Stephen Lee, AB7HI, slee@u.washington.edu

On Thu, 6 Jun 1996, Nick Franco wrote:

<snip>>

> The matching line is missing! Can someone tell me how long to make the
> 75 ohm coax matching line.

<snip>

> 72

> Nick

> KF2PH TMPS 1996 Qs=031 States=12 Confirmed=06 DX=04

> --

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996

From: JEVERHART@cayman.vf.mmc.com

Subject: [9481] Re: Help - Butternut HF6V

Message-ID: <960606131145.2520fe81@carib.vf.mmc.com>

Nick,

Yes, indeed, do as Lb says. Make sure you have a good earth ground for static
buildup protection. And I forgot to mention in the earlier message that there
is, indeed an inductor between across the base from the feedpoint to ground.
I've seen the Butternuts sold at hamfests without either the matching section
or the inductor. The latter assists in matching on 80 meters. If yours does
not have the inductor and you need info on it, let me know and I'll measure
mine.

It's about an inch or more in diameter and probably 15 to 20 turns of 14 ga
wire as I remember. Also working from memory another member of the group,
Bill Acito I believe, got a Butternut with the coil missing. Makes a
difference in the SWR on 80!

Good luck and 72/73,

Joe E., N2CX

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9488] Re: Loop Ants:
Message-ID: <Pine.SOL.3.91.960606145204.14318A-100000@utkux4.utcc.utk.edu>

Dub,

Your horizontal plane loop, 1 wl at 80 meters, up 35' plays approximately like this: (forward will always mean in the direction of the feedpoint apex to your triangle. I cannot be exact, because I have only general descriptions to go by, but this will be ballpark)

Freq	Input Z	Gain	T0 angle	
3.55	95 + 4	6.31	90	Gain at 45 deg = 3.25
7.15	235 + 210	6.96	47	
10.12	115 - 272	6.63	36	F-B ratio = 4 dB
14.15	305 + 175	10.05	28	F-B = 2 dB; pattern has side ears
18.1	435 + 715	12.01	20	F-B = 3 dB; bigger ears
21.1	175 + 280	11.68	17	F-B = 3 dB: 6-point star pattern
24.95	485 + 565	13.50	15	F-B = 3.5 dB; long Front and back points with frilly side ears
28.1	320 + 405	13.94	13	F-B = 4.5 dB; same as 24.95

Note that feedpoint values should be within reach of most ATUs. Angle high until 20 meters, then medium til 15, then good for dx, but side-to-side beam width of main lobe front and back gets very narrow on two upper bands. All in all, not a bad one-wire all-band antenna.

-73-
LB, W4RNL

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [9461] Re: Missing posts in Digest 380?
Message-ID: <96Jun6.085052-0400edt.65558-14099+81@hooch.CC.Lehigh.EDU>

> but did anyone else getting Digest 380 notice the messages that numbered 9372
> thru 9375 inclusive were not there, and several blank pages were? Or did the
> Net deliver some damaged packets to me? (I thought packets were always

> hand-shook, and verified before accepted.)

I can find no trouble at this end. Try fetching it from the server:

GET QRP-L/DIGESTS 380

73

Jim N3VXI

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996

From: Art Searle <asearle@netusa.net>

Subject: [9487] Re: Off topic

Message-ID: <31B75210.2A75@netusa.net>

Hi Guys,

I did it again, I forgot to turn off the cc for personal messages.
Sorry!

I got lots of interesting comments and it'll be my secret just how many shooters are on this reflector. I also got some negative mail and they are right, I should stay on topic. It was unintentional.

72, de Art

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member

QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR

NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member

NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@Lehigh.EDU Thu Jun 6 23:25:23 1996

From: JDuffy@aol.com

Subject: [9462] Re: Shooters

Message-ID: <960606085657_211654962@emout10.mail.aol.com>

My 15 yr. old daughter has gotten into muzzle loaders. But she is kinda QRP only using 30 grains of blackpowder.

Regards,

Duffy - WB8NUT

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: Art Searle <asearle@netusa.net>
Subject: [9486] Re: Shooters
Message-ID: <31B75490.E1A@netusa.net>

JDuffy@aol.com wrote:

>
> My 15 yr. old daughter has gotten into muzzle loaders. But she is kinda QRP
> only using 30 grains of blackpowder.
> Hi Duffy

I plain with gun powder of the black smokey kind.
I have a 50 cal virginial rifle, a 50 cal pistol,
both with double set triggers. I just love Ruger
cap and ball 1860 old army w/o the adj. sights.

72, de Art

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-1@Lehigh.EDU Thu Jun 6 23:25:23 1996
From: "Kerry W. Miller" <kmiller@flash.net>
Subject: [9453] Re: ZUNI LOOPERS FD CALL??
Message-ID: <2.2.32.19960606111023.0068f9e0@mail.flash.net>

At 05:45 AM 6/6/96, you wrote:

>If you are running a QRP FD, post your call here. If we know who you
>are, we can give you the proper 559 STX instead of the QRO 599 STX.
>72
> Bill, K5ZTY

...But what if our killer 5w and 40m loop really do put out a 5nn signal?
Listen for us from Cumby, TX (70 miles east of Dallas) under the callsign N5BTH.

Also, is anybody going to be at Hamcom in Dallas? I saw a posting earlier
about this but didn't see any responses.

73,
Kerry Miller
WD5ABC